

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

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## PCT

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Applicant's or agent's file reference FE241493	<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/KR2004/001879</b>	International filing date (day/month/year) <b>26 JULY 2004 (26.07.2004)</b>
Priority date(day/month/year) 25 JULY 2003 (25.07.2003)	
International Patent Classification (IPC) or both national classification and IPC <b>IPC7 H04B 17/00</b>	
Applicant <b>UTStarcom Korea Limited et al</b>	

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application


**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea  Facsimile No. 82-42-472-7140	Authorized officer  SONG, In Kwan  Telephone No. 82-42-481-5708
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001879

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format  
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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International application No.

PCT/KR2004/001879

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1 - 4	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 4	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 4	YES
	Claims		NO

**2. Citations and explanations :**

**1. Reference is made to the following document:**

D: US 6,407,689 B1 (QUALCOMM INC.) 18 June 2002

2. The present invention relates to a CDMA Signal Generator which uses a relatively low priced AWGN generator and SAW filter in order to reduce the overall manufacturing costs thereof, eliminates the need for the costly CDMA signal generator while functioning substantially the same as the conventional CDMA generator and tests an RF equipment at the CDMA band as well as at the WCDMA band.

3. D is directed to Method and apparatus for controlling stages of a multi-stage circuit which provides a control mechanism that can be used to control a sigma-delta ADC to provide the required level of performance while reducing power consumption. The sigma-delta ADC is designed with multiple stages and provides improved performance as more stages are enabled. The control mechanism selectively enables a sufficient number of stages to provide the required performance and disables remaining stages to conserve power.

4. D does not disclose the characteristic of the present invention which can test the distortion characteristics of the RF block units without using the costly CDMA signal generating equipment.

5. It is thus believed that Claims 1 - 4 meet the criteria set out in PCT Article 33(2)-(4). D does not teach nor fairly suggest any of the components which are especially set forth in the claims. Therefore, Claims 1 - 4 have novelty, an inventive step and industrial applicability.